Subject:	MINUTES - PCAG MEETING OF 08/28/03		
via:	email	cc: Sylvia Hamilton/SMNA	
From:	Reid Fisher		
То:	Harvey Packard for email distrib'n	Date:	September 15, 2003

**PRESENT:** See sign-in roster.

**AGENDA:** No new items proposed at the meeting outset. Meeting coordinated by Chair Sylvia Hamilton.

**Minutes of 7/10/03 Meeting:** The minutes were approved as written.

**Meeting Day/Time:** There was general approval of the rescheduling of PCAG meetings as evening meetings, on the 4<sup>th</sup> Thursday of the month, from 7-9 pm.

**Charter and By-Laws:** There was consensus approval of the changes circulated by Tracy Hemmeter (SCVWD) and Evelyn Heinrichs (sp?).

# Guest Presentation on Health Risk Assessment: Dr. David Ting (California Office of Environmental Health Hazard [OEHHA]) -

Dr. Ting has been involved in generation of the PHG (Public Health Goal) for perchlorate. OEHHA evaluates on the basis of health effects alone; other agencies consider economic and other constraints. The second draft of the PHG is available online at <a href="https://www.oehha.ca.gov/water/phg/120602perchlorate.html">www.oehha.ca.gov/water/phg/120602perchlorate.html</a>. The PHG is currently undergoing a second round of peer review, and finalization is anticipated in about 6 months.

Areas touched on by Dr. Ting (and elaborated on in the PHG report; the version below should not be relied upon for completeness or accuracy) included:

- A brief summary of the status of regulation of perchlorate, which until about 1997-1998 was not detectable below 400 ppb.
- Review of how perchlorate is absorbed, metabolized, and excreted by the human body. About 95% of an oral dose is excreted within 48 hours.
- Perchlorate's effect on the body is on the thyroid hormone feedback system, by affecting iodide uptake. Perchlorate is used to treat Grave's disease, a thyroid condition.
- Biological effects of perchlorate, first discussing the mode of action of perchlorate, then human clinical data, animal toxicity data, and genetic toxicity data.

- It is difficult to equate the oral dose administered in clinical studies to the
  amount ingested by consumers of contaminated well water. However, Tom
  Mohr's (SCVWD) back-of-the-envelope calculations indicate that the only
  group experiencing statistically significant effects in a critical study by Greer
  (2002) received approximately the same amount of perchlorate as a person
  drinking 2 liters of water a day with a perchlorate contaminant level of 17,000
  ppb. Lower-dosage groups did not experience statistically significant effects.
- Many of the conditions induced by perchlorate appear to be reversible, probably because it is so soluble.
- There have been no gene or chromosome effects observed, and genotoxicity is not considered a mode of carcinogenicity; observed tumors appear to be related to high levels of gland activity, not gene effects.
- The critical question is what is a "non-health-affective dose?" One approach is to pick a concentration at which there is no adverse effect. Another is to pick a threshold of effect, such as a 5% inhibition of thyroid activity. These results differ by a factor of about 2.
- Most clinical studies deal with healthy adults, typically males, but other
  populations such as pregnant women, fetuses, and infants may conceivably
  be affected by lesser amounts of perchlorate. As a result, the acceptable
  levels were reduced by 30-fold to address these "sensitive populations." It is
  also difficult to apply the results to people with a thyroid condition.
- The currently proposed PHG is 2 6 ppb.

#### RWQCB Status Report (Harvey Packard) -

- The State has established an "action level" of 4 ppb, on the basis of the PHG of 2 6 ppb, but it's not enforceable until the PHG is adopted. At that point, it will be termed an "MCL" (maximum contaminant level).
- Relatively few wells have been sampled more than once, and most of those
  are on-site or very close to the site (e.g. the U-Save Rockery). Perchlorate
  levels have varied widely in those tests.
- Sampling at quarterly intervals has begun for certain wells (see last minutes for decision criteria for bottled water funding by Olin). No-one has had free bottled water discontinued yet.
- Olin submitted a 8/12/03 report that updated and revised two reports submitted on 6/30/03. The footprint of detected contamination is larger than previously recognized. Olin has proposed a new method of mitigation, for which the RWQCB has encouraged preparation of a more detailed design; this approach would involve leaching of onsite soils and treatment of the leachate onsite. The key question will be how to monitor this approach and ensure that perchlorate is not being mobilized into the groundwater and escaping the site.
- Groundwater at the site has been measured as high as 7 feet below ground surface (bgs), and as low as 30 feet bgs.

# SMNA comments on status of mitigation effort –

There was a general desire to stress that *off*-site cleanup is the larger issue, and has lagged somewhat in regulatory attention. Mitigation of this problem will likely be more difficult, costly, and certainly will take longer to achieve than on-site cleanup. Involvement of area legislators is desireable in order to develop incentives, and prioritize regulatory efforts. Olin appears to be reluctant to act without clear health risk assessment data and a formalized PHG and MCL.

Santa Clara County Agricultural Commissioner Report (Greg Van Wassenhove) Greg Van Wassenhove distributed a 1-page handout summarizing actions on which legislators' support is desired in order to protect public health as affected by area agriculture. These focus on completing a risk assessment, and establishing testing and reporting protocols. The danger is that inaccurate, incomplete, or irresponsibly reported data or opinions could cause public or market reaction. It is not clear who would perform the review of data to be released. Nevertheless, there was consensus support for the effort to obtain the support of area legislators. The great variety of South Valley crops means that studies of perchlorate uptake would have consider widely varying crops (e.g. stone fruit, peppers, garlic, tomatos).

### **Additional Topics:**

Tracy Hemmeter (SCVWD), Tom Mohr (SCVWD), Gary Shallcross (rep. for Assemblyman Laird), Harvey Packard (RWQCB), and Reid Fisher volunteered to help draft a similar list of more general points on which area legislators could be of help.

Better outreach is needed to non-English-speaking populations, in order to keep folks informed on the status of investigation, and resources available.

## Upcoming (at time of meeting):

September 12, 2003 – Harvey Packard announced the next RWQCB meeting, to be held in Salinas. Attendance by a PCAG member was encouraged.

**NEXT PCAG MEETING:** Thurs September 25, 2003, 7 – 9pm at San Martin Lions Club Hall, 12415 Murphy Ave., San Martin. Agenda items to Sylvia Hamilton (sylvialrs@hotmail.com).

Minutes submitted by Reid Fisher